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(71) Applicant (for all designated States except US): BASELL POLYOLEFINE GMBH [DE/DE]; Brühler Strasse 60, 50389 Wesseling (DE).

(72) Inventor; and

(75) Inventor/Applicant (for US only): MIHAN, Shahram [IR/DE]; Am Eichwald 18, 65812 Bad Soden (DE).

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(54) Title: CATALYST SYSTEM FOR OLEFIN POLYMERIZATION

Al(OR1)4

(57) Abstract: The present invention relates to a catalyst system for olefin polymerization comprising an organic transition metal compound and, as cocatalyst, an ionic compound made up of anions of the formula (la), Where the radicals R1 are identical or different and are each, independently of one another, a radical $R^2R^3(CF_3)_2$, R^2 is a carbon or silicon atom and R^3 is hydrogen, C_1 - C_{20} -alkyl,

 $C_1 - C_{20} - \text{fluoroalkyl}, \ C_6 - C_{20} - \text{aryl}, \ C_6 - C_{20} - \text{fluoroaryl}, \ C_7 - C_{40} - \text{arylalkyl}, \ C_7 - C_{40} - \text{fluoroalkyl}, \ C_7 - C_{40} - \text{alkylaryl}, \ C_7 - C_{40} - \text{fluoroalkyl}, \ C_{10} - C_{10}$ laryl or an SiR43 group, where R4 may be identical or different and is each C1-C20-alkyl, C1-C20-fluoroalkyl, C6-C20-aryl, $fluoroaryl, C_7-C_{40}-arylalkyl, C_7-C_{40}-fluoroarylalkyl, C_7-C_{40}-alkylaryl \ or \ C_7-C_{40}-fluoroalkylaryl, \ and \ Lewis-acid cations \ or \ Brönsted$ acids as cations. In addition, the invention relates to the process for preparing such a catalyst system and to a process for the polymerization of olefins in which this catalyst system is used.



